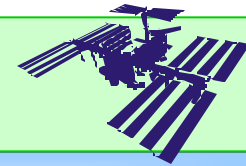


ISS Research Accommodations Status

14 October 2005 (Data through 30 September 2005) [POC: Dan Hartman/OZ]



Research

METRIC TYPE	STATUS	ORGANIZATION	ACCOUNTABLE POC	UPDATED
▶ Key Program Performance Indicators		▶ OZ	▶ Hartman	▶ 10/14/05

DESCRIPTOR

- ▶ The Research Indicator shows the Program's performance in accommodating the required Research Investigations that were established in the L-12-month plan.

STATUS DETAIL

- Increment 10: 56% of the number of Originally Planned Investigations were operated. *(Last Increment was 56%)*
- Increment 11: 50% of the number of Originally Planned Investigations are expected to be operated. *(Last month was 50%)*
- Increment 11: 61% of the number of Originally Planned Investigations will be operated if additional crewtime is provided. *(Was 61%)*
- Increment 12: 41% of the number of Originally Planned Investigations are expected to be operated. *(Was 41%)*
- Increment 12: 48% of the number of Originally Planned Investigations will be operated if additional crewtime and research upmass are provided. *(Was 48%)*
- Increment 13: 60% of the number of Originally Planned Investigations are expected to be operated. *(Was 60%)*
- Increment 13: 75% of the number of Originally Planned Investigations will be operated if additional crewtime and research upmass are provided. *(Was 75%)*

Note: During Shuttle stand-down, beginning with Increment 7, most Original Plan Investigations have been postponed due to their dependence on unique Shuttle capabilities (e.g., upmass, power during transport) and crewtime limitations with two crew. Other Investigations not requiring Shuttle capabilities or much crewtime have been accelerated for execution.

PERFORMANCE INDICATOR METRICS



Metrics / Performance Information

RESEARCH

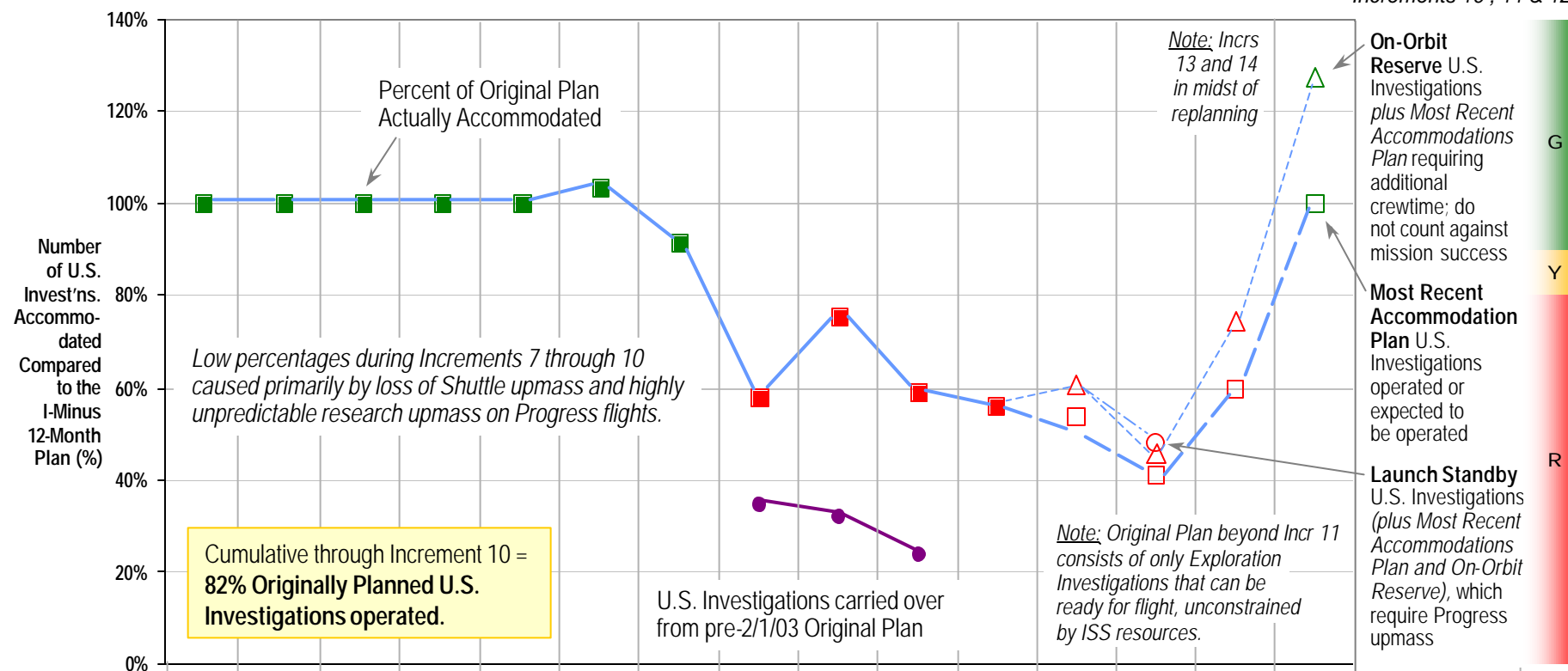
U.S. Research Investigations Accommodated,
Compared to the I-Minus 12-Month Plan

14 October 2005 (Data through 30 September 2005) [POC: Dan Hartman/OZ]

Status:

RED →

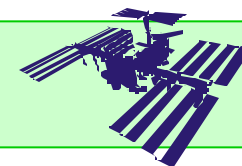
(RYG arrow based on
Increments 10, 11 & 12)



No. of U.S. Investigations	Inc 0 (9/2000)	Inc 1 (11/2000)	Inc 2 (3/2001)	Inc 3 (8/2001)	Inc 4 (12/2001)	Inc 5 (6/2002)	Inc 6 (11/2002)	Inc 7 (4/2003)	Inc 8 (10/2003)	Inc 9 (4/2004)	Inc 10 (10/2004)	Inc 11* (4/2005)	Inc 12* (9/2005)	Inc 13* (4/2006)	Inc 14* (10/2006)	Inc 15 (NET 4/2007)
New	3	3	17	18	11	12	6	2	8	4	2	4/5	7/9	18/21	11/13	* Most Recent Plan / Most Recent Plan plus On-Orbit Reserve plus Launch Standby
Continuing	0	1	3	10	21	18	16	12	16	16	17	10/12	12/13	15/20	18/24	
Incr Total	3	4	20	28	32	30	22	14	24	20	19	14/17	19/22	33/41	29/37	
Cume New	3	6	23	41	52	64	70	72	80	84	86	90/91	97/100	115/121	126/134	
Cume Total	3	7	27	55	87	117	139	153	177	197	216	230/233	249/255	282/296	311/333	

RESEARCH: Metrics Definitions, Sources, and Status Levels

14 October 2005 (Data through 30 September 2005) [POC: Dan Hartman/OZ]



U.S. Investigations: Any NASA-sponsored scientific research, commercial research, engineering research, Earth observations, partner research sponsored through NASA, and education experiments or demonstrations conducted on-board ISS. Does not include Risk Mitigation Tests (*see separate definition*).

Source: Lead Increment Scientist

Total Number of U.S. Investigations to Date: The cumulative number of U.S.-sponsored investigations carried out on ISS to date. This number also includes any international investigations conducted with U.S. research resources as part of agreements with the ISS international partners. If an investigation requires experimentation on more than one Increment, it is designated a continuing investigation and counted only once. The cumulative number is updated at the date of each Shuttle (or Progress/Soyuz) flight to ISS, which is when new investigations are added.

Source: The Investigator Master List, maintained by the Lead Increment Scientist, provides the number per Increment. The Increment Scientist also provides the cumulative number per Shuttle (Soyuz/Progress) flight.

Increment Length: The time period that an expedition crew is on orbit. It is measured from their launch date to their ISS undock date, and is documented in the Increment Definition Requirements Document (IDRD) Flight Program Definition matrix.

Number of U.S. Investigations Planned Per Increment: The number of U.S.-sponsored investigations planned 12 months in advance for an Increment, including both new and continuing investigations occurring during that Increment.

Number of U.S. Investigations Operated Per Increment: (N_A) The number of U.S.-sponsored investigations actually carried out during an Increment, at least partially, including both new and continuing investigations.

Source: ISS Research Accommodations list, maintained by the Lead Increment Scientist.

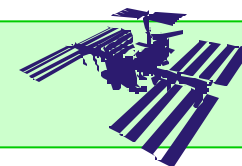
Number of U.S. Investigations – Original Plan: (N_O) The number of U.S.-sponsored investigations planned for the Increment approximately 12 months prior to the start of the Increment, including both new and continuing investigations during that Increment.

Number of U.S. Investigations – Replan: (N_R) The number of U.S.-sponsored investigations for the Increment replanned in April 2003 after the Columbia STS-107 accident, including both new and continuing investigations during that Increment.

Number of U.S. Investigations – Most Recent Accommodation Plan: (N_E) The number of U.S.-sponsored investigations for the Increment that have been approved and included in the Final Integrated On-Orbit Summary (OOS) to be operated in the Increment; also includes both new and continuing investigations during that Increment.

RESEARCH: Metrics Definitions, Sources, and Status Levels

14 October 2005 (Data through 30 September 2005) [POC: Dan Hartman/OZ]



Number of U.S. Investigations – Launch Standby:

(N_S) The number of additional U.S.-sponsored investigations for the Increment that have been requested for manifesting on Soyuz or Progress, but are not yet approved or manifested by Roscosmos; includes both new and continuing Investigations during that Increment.

Number of U.S. Investigations – On-Orbit Reserve:

(N_R) The number of additional U.S.-sponsored investigations that have all the necessary equipment on orbit and have been requested for scheduling, but are not scheduled in the Final Integrated OOS due to crewtime limitations; includes both new and continuing Investigations during that Increment.

Risk Mitigation Tests: Engineering and Equipment Tests of research payload hardware conducted on-board ISS to improve the probability of success of a future investigation. Risk Mitigation Tests are not included under the definition of Investigations (see *separate definition*).

Source: ISS Research Accommodations list, maintained by the Lead Increment Scientist.

Current U.S. Investigations Carried Over from the Original Plan (N_{OP}): The number of U.S.-sponsored investigations that specifically appear in both the Original Plan and the Post-2/1/03 Replan.

Percent of Original Plan Accommodated (Actual or Scheduled) (P_O)

$$P_O = 100 \times (N_A \text{ or } N_E) / N_O$$

Scheduled, including Launch Standby (P_S)

$$P_S = 100 \times (N_E + N_S) / N_O$$

Percent of Current U.S. Investigations Carried Over from the Original Plan (P_{OP})

$$P_{OP} = 100 \times N_{OP} / N_O$$

Status Level Definitions

Number of U.S. Investigations Operated Per Increment

Green: 90% or more U.S. investigations operated.

Yellow: 80-90% of U.S. investigations operated.

Red: Less than 80% of U.S. investigations operated.